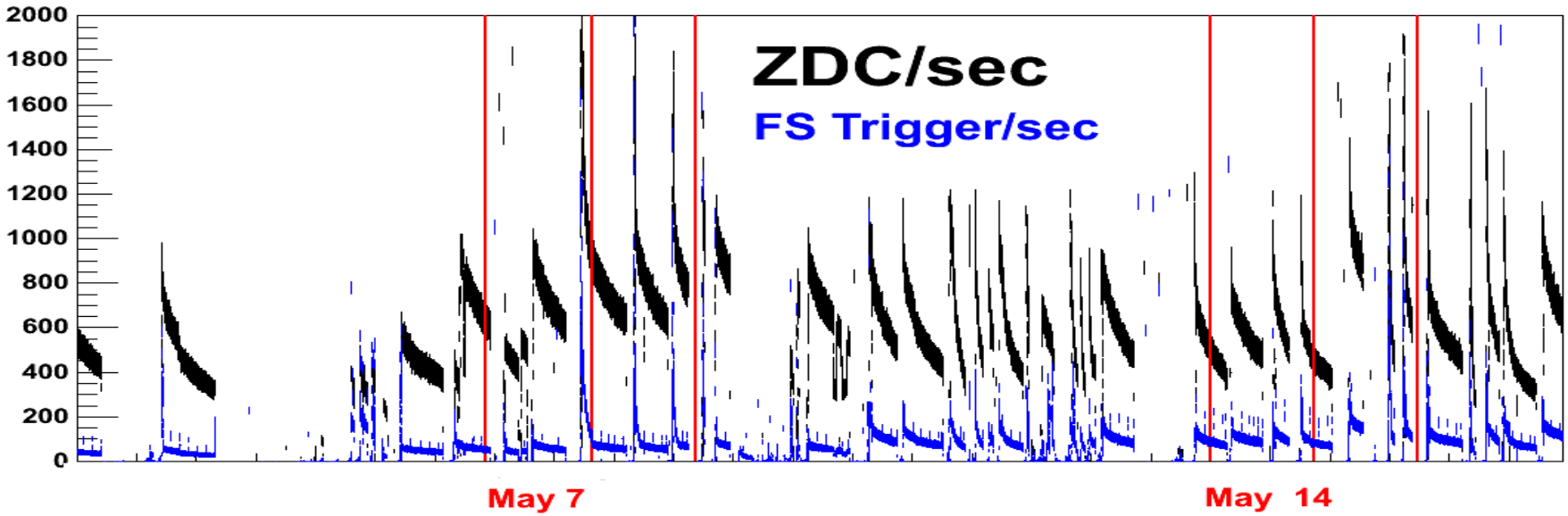
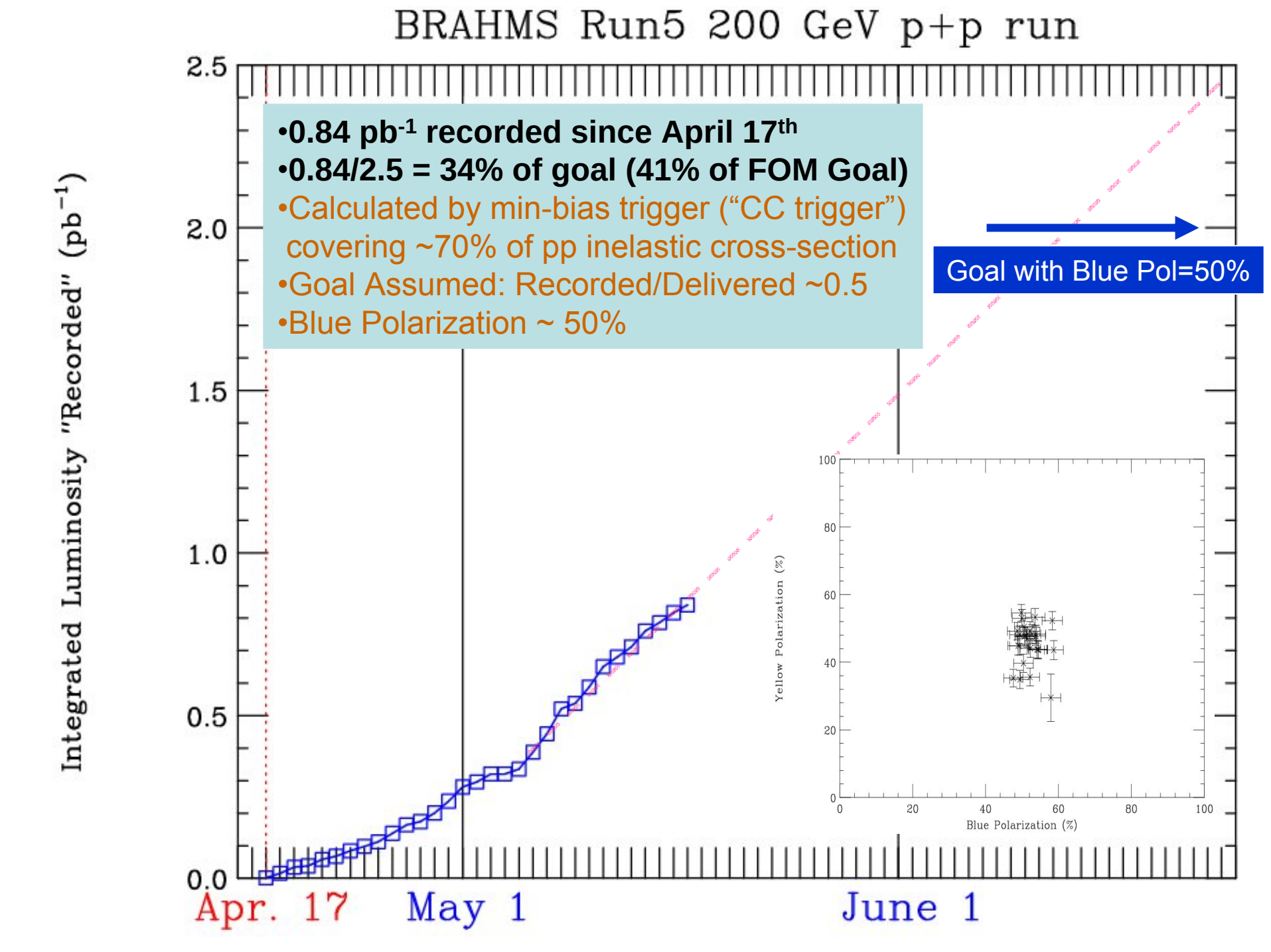
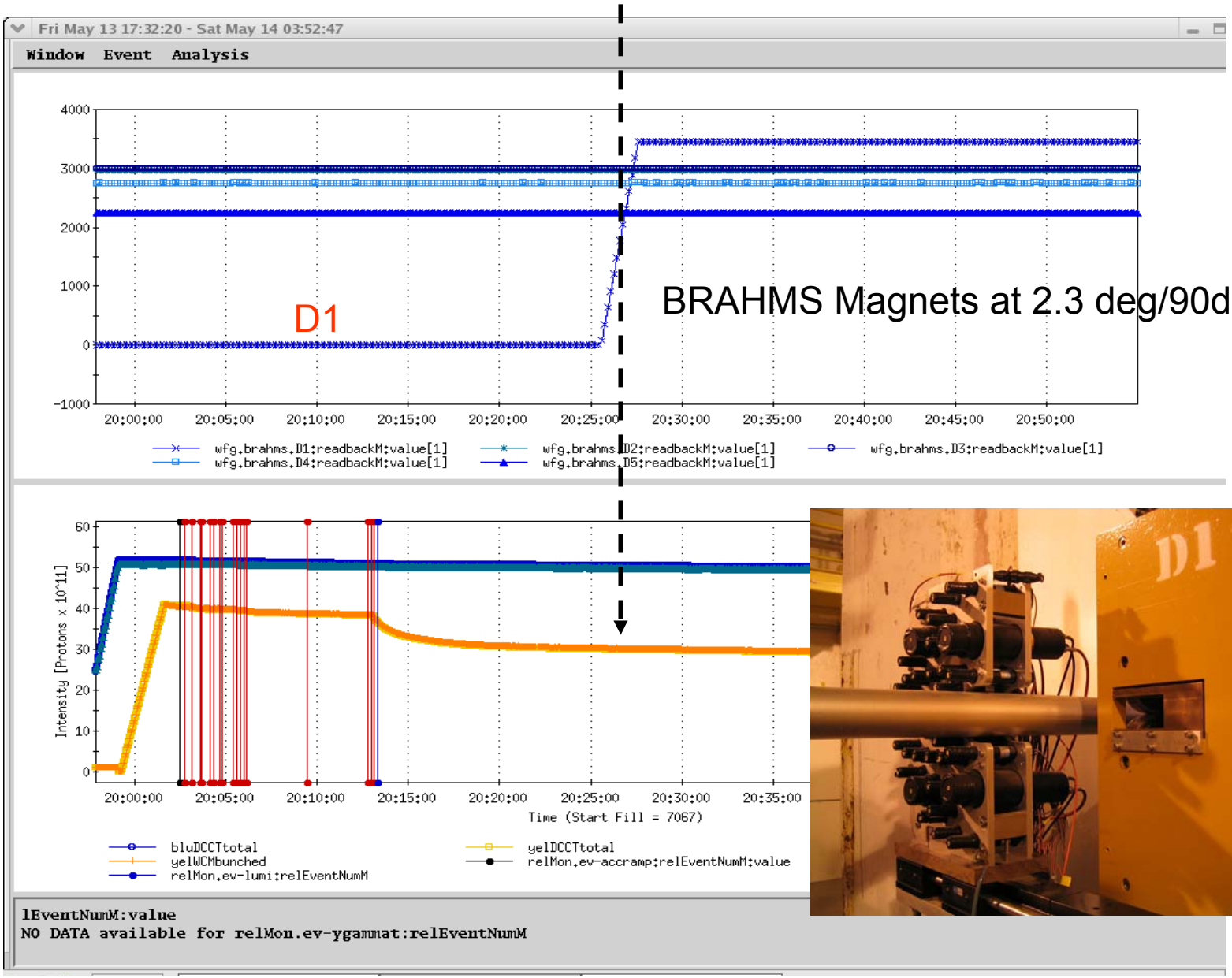
BRAHMS Run5 pp Status



- Physics data taking with Spectrometer triggers since April 17th
- DAQ time in the previous week (May 9-May 17 12pm): 90hr (9.5hr/day)
- Main physics goal: single spin transverse asymmetry at high-x
  - To meet the physics goal: 5pb^{-1} (delivered) with pol.≥45%
  - Major setting: FS at 2.3 deg. at fill field setting to sample high-p
- FS spectrometer Trigger efficiency:~65% at 2.3deg high-p (x_F) setting
  - Luminosity limited. DAQ will saturate at ZDC~2.5K or more


BRAHMS Run5 200 GeV p+p run
•0.84 pb-1 recorded since April 17th
•0.84/2.5 = 34% of goal (41% of FOM Goal)
•Calculated by min-bias trigger ("CC trigger") covering ~70% of pp inelastic cross-section
•Goal Assumed: Recorded/Delivered ~0.5
•Blue Polarization ~ 50%
Goal with Blue Pol=50%
Integrated Luminosity "Recorded" (pb-1)
2.5
2.0
1.5
1.0
0.5
0.0
Apr. 17
May 1
June 1
Yellow Polarization (%)
Blue Polarization (%)
0
20
40
60
80
100


Fri May 13 17:32:20 - Sat May 14 03:52:47
Window Event Analysis
4000
3000
2000
1000
0
-1000
20:00:00
20:05:00
20:10:00
20:15:00
20:20:00
20:25:00
20:30:00
20:35:00
20:40:00
20:45:00
20:50:00
D1
BRAHMS Magnets at 2.3 deg/90deg
wfg.brahms.D1:readbackM:value[1]
wfg.brahms.D2:readbackM:value[1]
wfg.brahms.D3:readbackM:value[1]
wfg.brahms.D4:readbackM:value[1]
wfg.brahms.D5:readbackM:value[1]
Intensity [Protons x 10^11]
60
50
40
30
20
10
0
20:00:00
20:05:00
20:10:00
20:15:00
20:20:00
20:25:00
20:30:00
20:35:00
Time (Start Fill = 7067)
bluDCCTtotal
yelWCMbunched
relMon.ev-lumi:relEventNumM
yelDCCTtotal
relMon.ev-accramp:relEventNumM:value
lEventNumM:value
NO DATA available for relMon.ev-ygammat:relEventNumM
D1